PROGRAMME CALENDAR 2022-23

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NATIONAL INSTITUTE OF TECHNIAL TEACHERS' TRAINING AND RESEARCH, KOLKATA
Block – FC, Sector – III, Salt Lake City, Kolkata – 700 106

TECHNICAL EDUCATION MISSION

TECHNICAL EDUCATION VISION

NITTTR, Kolkata envisions to be the lead resource institute for promoting excellence in technical education, management education and

- To introduce emerging scientific technologies for development of effective teaching-learning system in technical education,
- To increase the outreach of training by adopting flexible & Open Learning Technology,
- To integrate the world of work with the technical education system,
- To assist policy makers as a think-tank in formulating TVET strategies,
- To offer extension services and consultancy appropriate to TVET system, in collaboration with industry and community partnership,
- To develop and introduce Quality Management System,
- To share experience and collaborate with national and international agencies involved in technical education for mutual benefits,
- To undertake research in different areas of TVET system.

About Us

National Institute of Technical Teachers' Training & Research (NITTTR), Kolkata was established in 1965 as Technical Teachers' Training Institute, Calcutta. This was the first of four such Institutes (other three being at Chandigarh, Bhopal and Chennai) established by the Department of Education, Govt. of India as fully centrally funded Autonomous Institution. The primary focus of the Institute is to provide in-service training to the teachers and staff of Degree and Diploma level technical institutions and conduct activities related to the quality improvement of the technical education system of the country. NITTTR, Kolkata has been actively involved in improvement of quality of the technical education system in various states including those in the north-east through innovative academic interventions, providing assistance to policy makers at the national and state levels, in formulation of educational plans, projects and their implementation in the fast changing scenario. By virtue of working closely over the last few decades, this institute has developed a thorough understanding of the technical educational needs of the states in the eastern region including those in the north-east. Govt. of India, in 2003, accorded national status to the Institute, in recognition to the expert services rendered for overall improvement of quality of Technical Education System. NITTTR, Kolkata acts as a catalyst in introducing changes in the various components of technical education system, plays a proactive role in identifying changes in the industry, technology, economy and society and acts as a facilitator in this process of change.

Some of the notable national level projects in which the Institute is associated are Nodal agency to Centrally Sponsored Community Development through Polytechnic Scheme, Designing & conducting AICTE sponsored "Induction Training Programme" for fresh teachers of engineering and polytechnic colleges, Facilitating implementation of Centrally sponsored Scheme for Integrating Persons with Disabilities (PWD) in the mainstream of Technical & Vocational Education etc.

The focal activities of the Institute are Short Term Training, Curriculum Development, Learning Resources Development, Research in the field of Technical Education System, Educational Management and Extension Services. Besides regular activities, the Institute has been offering, since 2003, AICTE approved M. Tech. Degree Programme in Manufacturing Technology, affiliated to WBUT. During 2005-2006 two more M. Tech. Programmes namely Multimedia & Software Systems and Mechatronics Engineering were started. The M. Tech. Programme in Structural Engineering was also started from 2011-12. The Institute has highly qualified faculty members and excellent infrastructural support in the form of well-equipped laboratories, computers, library facilities, Welding Centre, CAD/CAM and other resources. The institute has two Extension Centres one at Guwahati and the other in Bhubaneswar for reaching out to its clients in the North-east and Orissa. At present this Institution is also focusing on others, Teachers' Training through ICT Mode.

Preface

Like previous years, National Institute of Technical Teachers' Training and Research (NITTTR), Kolkata has prepared its Programme Calendar for the year 2022-23.

In order to fulfill the needs of technical teachers of the country, Short- Term Training programmes (STTP) in the following modes are planned.

1. Contact mode at NITTTR, Kolkata and/or the extension centres
2. ICT-based Programmes
3. In-House Programmes
4. Demand-based Special Programmes (both offline and online)
5. Hybridmode

The schedules of the trainings planned in this calendar are not exhaustive. The Institute also provides trainings based on specific needs of various stake holders including Private Technical Institutes following the guidelines of the Institute. Further, In-House training may be organized to fulfil the requirement of Faculty Development Programme of various Technical Institutes.
It is intended that all Technical Institutes will come up with their needs and take advantage of services provided by NITTTR, Kolkata. This helps to upgrade the learning-teaching system of the institutes and in turn, enriches the education system of the country.

NATIONAL INSTITUTE OF TECHNICAL TEACHERS' TRAINING AND RESEARCH, KOLKATA

Registration for STTP – Application Form

1 Prog. Code :

2 (a) Programme Title :

(b) Date : From: To:

(c) Prog. Coordinator(s) :

3 (a) Name (in CAPS) : First Middle Last

(b) Designation :

(c) Department :

(d) Institution :

(e) Institute Address :

Pin:

State

(f) Caste : (g) Gender

(h) Contact Number : Mobile

Email

4 Highest Academic Qualification:

Degree/Diploma	University/Others	Year of Passing	Class Obtained

5 (a) Experience (in years) : Teaching Industry/Field

6. Payment of Convenience Charge Rs. 118/- Paid – Yes ☐ No ☐, If yes, Receipt No. _____

I promise to attend the above mentioned training programme, if selected.

Date: Signature of the Applicant

This is to certify that the applicant will be released to attend the training programme, if selected, without any financial liability on part of the sponsoring authority.

Date: Signature of the Sponsoring Authority with Seal

NOTE: Application without Signature & Seal of the Sponsoring Authority will not be considered for selection.

Scan copy send by Email: ***academic@nitttrkol.ac.in***

Programme Calendar 2022-23

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NATIONAL LEVEL SHORT TERM TRAINING PROGRAMMES

Sl. No.	Prog. Code	Mode	Venue	Programme Title	Programme Co-ordinator (s)	Date		Week	Target Participant / Group	Programme Objectives
						From	To			
1.	PS06	Contact	BBSR	Word Processing with LaTeX	Kinsuk Giri	02/01/2023	06/01/2023	1	All Discipline	On successful completion of the programme the participants will be able to • get exposure in Word Processing Tools • describe the fundamentals LaTeX programming • apply LaTeX for preparing scientific and non-scientific documents
2.	CU22	ICT	Kol	Introduction to Finite Element Method	Mithu Dey	02/01/2023	06/01/2023	1	Faculty of Civil engg and allied braches	After attending the program, participants are expected to be able to • Understand the different methods of structural analysis • Familiar with FEM • Apply the FEM in solving problems • Know the use of FEM based software for analysis
3.	CU26	Contact	Kol	Power Plant Engineering	Subrata Chattopadhyay	09/01/2023	13/01/2023	1	Faculty from Elect., Mech., Electronics, Instrumentation and allied disciplines	After attending the course the participants will be able to • Understand electrical equipment used in power plant • Know instrument transformers [CT & PT] and their applications • Familiar with measurement and instrumentation in power plant • Classify the Different types of transducers and fundamental of pressure, flow, temperature, level, velocity, acceleration, vibration, position, displacement measuring transducers used in power plant. • Application of PLC & DCS in power plant • Apply SCADA and power plant automation • Design boiler, furnace instrumentation and control • Know hazardous area classification
4.	CU61	ICT	Kol	Application of MATLAB Control System, Image Processing and Fuzzy Logic Tool box	Sagarika Pal	09/01/2023	13/01/2023	1	Faculty of Electrical, Mechanical, Electronics & Instrumentation disciplines	After completing the course the participant will be able to • Use MATLAB commands • Apply Control System Tool Box Commands • Illustrate Simulink Modelling techniques • Apply Image processing Tool Box Commands • Apply Fuzzy Logic Tool Box Create GUI using GUIDE

Prog. Code: CU – Contant Update, PS – Professional Skill, MGT – Management

Prog. Mode: Contact - Office Line, ICT – Online

Venue: Kol – Kolkata Main Centre, BBSR – Bhubaneswar, Odisha Extension Centre, Guw – Guwahati, Assam Extension Centre.

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5.	CU84	Contact	Kol	Applied Chemistry Lab	Sailendra Nath Mandal	09/01/2023	13/01/2023	1	Faculty and Staff of chemistry	After attending the programme the participants will be able to acquire 1. knowledge of major applied chemistry experiment and practical significance of each experiment. 2. skill of handling conventional and advanced equipment, performing experiments, interpreting results, preparing test report, providing laboratory instructions to develop inquiring attitude among the student and evaluation of laboratory performance in related to applied chemistry laboratory, 3. attitude of hands-on-working in the laboratory/field (Plant Visit)
6.	CU85	ICT	Kol	Non Traditional Machining Processes	Dipankar Bose	09/01/2023	13/01/2023	1	Faculty members of Technical Institutions with ME, Production ,Automobile Engineering Specialization	After attending the programme the participants will be able to • explain various types of non-traditional machining processes • understand working principles of different non-traditional machining processes • hands on practices on various non-traditional machining processes
7.	CU86	ICT	Kol	Applications of LABVIEW & MATLAB in Engineering	Soumitra Kumar Mandal	09/01/2023	13/01/2023	1	Faculty and Lab. Tech. of Engg. & Polytechnic in EE, ECE, EIE & Allied Branch.	After attending the programme, the participants will be able to • Understand fundamentals of LABVIEW • Implement LABVIEW Applications in Engineering • Explain the different aspect of MATLAB & Simulink • Solve simple problem using MATLAB programming • Develop simple model using Simulink • Use MATLAB in analysis, design and simulation of Engineering problems
8.	PS04	ICT	Kol	Entrepreneurship Development	Subrata Mondal	09/01/2023	13/01/2023	1	Faculty of all disciplines	After attending this programme, participants would be able to: • explore concept of entrepreneurship; • identify internal and external factors for entrepreneurship; • explore characteristics of an entrepreneur; • explore entrepreneurial motivation and barrier; • explore stages in entrepreneur process; • explore research commercialization; • explore technology business incubation Centre etc.
9.	CU87	ICT	Kol	Mathematical Foundation of Computer Science	Kinsuk Giri & Samir Roy	09/01/2023	20/01/2023	2	All Discipline	On successful completion of the programme the participants will be able to • able to explain mathematical/logical foundation of computations • model computational tasks in terms of mathematical formalism • apply appropriate mathematical tools to solve computational problem

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10.	SPL04	ICT	Kol	Ecology and Environmental Studies	Uday Chand Kumar	09/01/2023	20/01/2023	2	Faculty and Staff from all disciplines	After attending the program, the participants will be able to • Define the Ecology • Describe the different causes of air, water and soil pollution • Explain the low cost sanitation • Describe the solid waste management.
11.	CU88	ICT	Kol	Analysis and Design of Structures using latest version of a Structural Engineering Software	Santanu Bhanja	16/01/2023	20/01/2023	1	Faculty of Civil, Architecture & allied disciplines	After attending the programme, the participants will be able to • Understand the role of software in structural analysis and design • Know the basic features of a universally accepted software- STAAD.Pro Connect- latest version along with RCDC • Apply IS Codal provisions in analysis, design and detailing - IS 456, 1893, 875, 13920 etc. • Analyse, design and detail real-life multi- storeyed buildings, civil engineering structures • Analyse and design foundations
12.	PS62	Contact	Kol	Laboratory practices on Civil Engineering Materials *(Concrete and Road Material)*	Mithu Dey	16/01/2023	20/01/2023	1	Civil engg and allied braches	After attending the program, participants are expected to be able to • Develop Skill & Knowledge on the fundamentals involved in testing of various ingredients of Civil Engg. Materials. • Familiar with the use of NDT equipments
13.	CU89	Contact	Kol	Fundamentals of Image Editing and 2D Animation	Indrajit Saha	16/01/2023	20/01/2023	1	All Discipline	After attending the program, the participants will be able to • edit images and create animation • get exposure in various multimedia related software • prepare a small computer based training material
14.	CU90	Contact	Guw	Modern Industrial Control Syastem	Subrata Chattopadhyay	16/01/2023	20/01/2023	1	Faculty from Electrical, Mechanical, Electronics, Instrumentation and allied disciplines	After attending the course the participants will be able to • Familiar with closed loop control system • Understand the pressure, Temperature, Flow & Level Measurement system • Know hazardous area classification • Utilize the electrical instruments in hazardous area in process plant • Design the conventional complex control system like ratio, cascade, feed forward, selective, override etc • Apply the control system in distillation column in industry • Know the fundamental of PLC, DCS and SCADA
15.	PS64	ICT	Kol	Estimating and Costing of Non-conventional Energies	Sheela Yadav Rai	16/01/2023	20/01/2023	1	All Discipline	After attending the programme the participants will be able to : • Describe various type of Non-conventional Energies Sources • Understand the scope of Solar energy, Solar Thermal Conversion, Solar Collector, Wind Energy • Estimating & costing of various energies

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						From	To			
16.	PS65	ICT	Kol	Advanced Pedagogy	Sukanta Kumar Naskar & Arpan Kumar Mondal	16/01/2023	27/01/2023	2	Techical teachers from all disciplines	After attending the program, the participants will be able to • Explain the need of Advanced Pedagogy • Understand the fundamental strategies of advanced pedagogy techniques • Explain different Advanced Pedagogy Approaches • Plan instruction • Incorporate different principles for effective delivery and assessment
17.	PS66	ICT	Kol	Thesis and Research paper writing	Rayapati Subbarao	30/01/2023	03/02/2023	1	Any faculty	At the end of the programme, the participants will be to: • Identify stages in thesis writing. • Discuss the results in a refined way. • Learn the ways of writing and communicating a research paper.
18.	CU73	ICT	Kol	Object Oriented Design & Programming in C++	Rajeev Chatterjee & Samir Roy	30/01/2023	03/02/2023	1	Faculty of CSE, IT Computer Application, Electronics, Electrical, Mathematics disciplines	After successful completion of the program, the participants will be able to • Create an Object-Oriented Model of a software, • Use of UML for Software Design • Write a Program in C++ to solve a computational problem • Compile, debug and execute a program in C++ • Apply objects, classes, inheritance, polymorphism etc. to implement object oriented programming.
19.	PS67	ICT	Kol	NBA Accreditation and SAR Preparation for Polytecnics	Arpan Kumar Mondal & Ranjan Dasgupta	30/01/2023	03/02/2023	1	Techical teachers from all disciplines	After attending the course the participants will be able to • Identify the Impact of NBA Accreditation • Prepare Vision, Mission, PEO and PSO • Prepare CO-PO mapping • Learn how to prepare pre-qualifier and SAR. • Practice Criteria 1 to 10 • Understand the washington accord
20.	CU82	ICT	Kol	PLC Programming and its Applications	Sagarika Pal	30/01/2023	03/02/2023	1	Faculty of Electrical, Mechanical, Electronics & Instrumentation disciplines	After completing the course the participant will be able to • Explain working principle of PLC • Describe architecture of PLC system • Develop PLC programmes • Apply PLC in various system automation
21.	CU09	Contact	Kol	Modern Control	Prasanta Sarkar	30/01/2023	03/02/2023	1	Faculty of Engineering Disciplines	After attending the programme, the participants will be able to • Model physical systems in state space • Realise state space model from Transfer function • Determine Controllability and observability • Design controller and observer • Apply MATLAB Control System Toolbox

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						From	To			
22.	PS68	ICT	Kol	Renewable Energy Sources and Emerging Technologies	Sheela Yadav Rai	06/02/2023	10/02/2023	1	All Discipline	After attending the programme the participants will be able to: • Understand Energy Sources and their utilization • Explain Environmental aspects of electric energies generation • Understand the scope of Solar Thermal Conversion and Solar Photovoltaic system • Describe about wind energy, Geothermal energy and Biomass • Apply Non-conventional energies through various agencies • viz. WBREDA
23.	PS69	Contact	Guw	NBA Accreditation and SAR Preparation	Rayapati Subbarao	06/02/2023	10/02/2023	1	All Discipline	At the end of the programme, the participants will be to: • Identify the Impact of NBA Accreditation. • Prepare Vision, Mission, Program Educational Objectives. • List out Course and Program Outcomes. • Learn how to prepare SAR. • Practice Criteria i to x.
24.	MGT11	ICT	Kol	Research Methodology	Chandan Chakraborty	06/02/2023	10/02/2023	1	Faculty of all disciplines	After completion of this course the participants will be competent enough to • Develop understanding of the research design, interdisciplinary research in the line of NEP 2020. • Explore about systematic literature review with meta-analysis, PRISMA • Gain knowledge in data analytics using statistical methods • Hands-on-training with Excel and SPSS for data analysis. • Paper writing, thesis reporting etc.
25.	SPL21	ICT	Kol	Advanced Pedagogy	Urmila Kar	06/02/2023	17/02/2023	2	Faculty of all Disciplines	After attending the programme, participants will be able to: Explore innovative approaches in curriculum design and development for higher education · Evaluate contemporary pedagogical practices in Higher Education ·Promote Outcome Based Education ·Incorporate technology in teaching to enhance the teaching learning process ·Identify innovative pedagogical practices in higher education ·Engage students in complex problem solving and critical thinking ·Develop teaching style to match learning styles of students ·Design tools for assessing learning ·Plan teaching for Education 4.0

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26.	CU92	ICT	Kol	Machine Learning with PYTHON	Kinsuk Giri & Chandan Chakrabarty	13/02/2023	17/02/2023	1	All Discipline	On successful completion of the programme the participants will be will be accomplished with • The notion of Machine Learning and its impact on future employment • Overview of Python programming • Exposure of supervised and unsupervised ML techniques • Hands-on-practice of ML algorithms implementation using Python • Explore for problem solving
27.	CU93	Contact and ICT (both)	Kol	LABVIEW Application in Engineering	Sagarika Pal	13/02/2023	17/02/2023	1	Faculty of Electrical, Mechanical, Electronics & Instrumentation disciplines	After completing the course the participant will be able to • Explain features of LABVIEW • Create VI files • Apply VI files in various fields • Apply Data Acquisition System in LABVIEW
28.	PS70	Contact	Guw	Innovation and Startup in Higher Education Institutions	Prasanta Sarkar	13/02/2023	17/02/2023	1	Faculty of all Disciplines	After attending the programme, the participants will be able to • Create awareness on Entrepreneurship • development among students and faculty • Promote entrepreneurship • Provide support service fo incubation and startup
29.	CU37	Contact	Kol	Advanced Materials Science and Engineering	Subrata Mondal	13/02/2023	17/02/2023	1	Faculty of Chemical Engg. Mechanical Engg., Science, Textiles Engg., Materials Sci. & Engg., Polymer Engg. and allied disciplines	After attending this program, participants would be able to: • explain the structure sensitive properties of polymers, metals and alloys; • explain the fundamental of nanomaterials, types of nanomaterials, principle methods of nanomaterials preparation, properties and applications; • explain types, manufacturing process, properties and applications of metal matrix, ceramic matrix and polymer matrix composites/nanocomposites; • explain biocompatible and biodegradable materials, characteristics and applications for various biomaterials etc.
30.	CU42	Contact	Kol	Concept of Software Engineering	Samir Roy & Ranjan Dasgupta	13/02/2023	17/02/2023	1	Faculty of CSE, IT, MCA disciplines	After successful completion of the program, the participants will be able to • explain different quality aspects of a software • critically analyse different software development models • explain design theory

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						From	To			
31.	PS35	ICT	Kol	Development of Laboratory Instruction and Manual	Dipankar Bose	13/02/2023	17/02/2023	1	Faculty members of all technical Institutions of Orissa	After attending the programme, the participants will be able to • classify various skills involved in laboratory practices • know various categories of laboratory experiments • write laboratory instruction sheets • Know evaluation techniques
32.	CU36	Contact	BBSR	Theory, Operation and Experimentation on Sensors, Transducers & Actuators	Subrata Chattopadhyay	13/02/2023	17/02/2023	1	Faculty from Electrical, Mechanical, Electronics, Instrumentation and allied disciplines	After attending the course the participants will be able to • Classify the Different types of Transducers & Actuators used in Industry. • Familiar with the overview of measurement system and selection of instruments • Understand fundamental of pressure, flow, temperature, level, velocity, acceleration, vibration, position, displacement measuring transducers used in process industries. • Apply the Transducers Actuators in process Control Systems. • Know the concept of Intrinsic safety instruments
33.	CU94	ICT	Kol	Application of AutoCAD in Engineering & Basic Sciences	Mithu Dey	20/02/2023	24/02/2023	1	Faculty and Staff of all disciplines	After attending the program, participants are expected to be able to • Know the different commands of the Software • Draw the 2D and 3DAppreciate the use of AutoCAD in Engg. And Science
34.	CU95	Contact	BBSR	Analysis and Design of structures using a powerful Structural Engineering Software	Santanu Bhanja	20/02/2023	24/02/2023	1	Faculty of Civil, Architecture & allied disciplines	After attending the programme, the participants will be able to • Understand the role of software in structural analysis and design • Know the basic features of a universally accepted software- STAAD.Pro Connect- latest version along with RCDC • Apply IS Codal provisions in analysis, design and detailing - IS 456, 1893, 875, 13920 etc. • Analyse, design and detail real-life multi- storeyed buildings, civil engineering structures • Analyse and design foundations
35.	CU96	ICT	Kol	Fundamentals of Technology Enabled Learning	Indrajit Saha	20/02/2023	24/02/2023	1	All Discipline	After attending the course the participants will be able to • describe the National policy regarding Technology in Education • apply the current Technology in online Education • explain the ethical issues in Technology Enable Learning
36.	PS71	ICT	Kol	FDP on Lifeskill Development	D. P. Mishra & Sukanta Kumar Naskar	20/02/2023	24/02/2023	1	Teachers, Technician and Administrator	After attending the program, the participants will be able to • Be acquainted with various life skills. • Appreciate the applications of various life skills

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37.	PS01	ICT	Kol	Development of Laboratory Instruction and Manual	Sagarika Pal	20/02/2023	24/02/2023	1	Faculty of Electrical, Mechanical, Electronics & Instrumentation disciplines	After completing the course the participants will be able to • Select the laboratory experiments from curriculum • Prepare laboratory manual • Guide student to perform laboratory experiment • Evaluate the laboratory performance of students • Guide students' project work • Evaluate students' project work
38.	PS72	ICT	Kol	NBA Accreditation and SAR Preparation for Polytecnics and Engineering Colleges	Arpan Kumar Mondal & Ranjan Dasgupta	27/02/2023	03/03/2023	1	Techical teachers from all disciplines	After attending the course the participants will be able to • Identify the Impact of NBA Accreditation • Prepare Vision, Mission, PEO and PSO • Prepare CO-PO mapping • Learn how to prepare pre-qualifier and SAR. • Practice Criteria 1 to 10 • Understand the washington accord • Understand the esence of CEP and LLL
39.	SPL27	Contact	Guw	Disaster Management	Uday Chand Kumar	27/02/2023	03/03/2023	1	Faculty and Staff from Technical Institution	After attending the programme the participants will be able to • Define Desaster • Types of Disaster • Causes of Disaster • Safety required before disaster • Remedial Action After the Disaster
40.	CU02	ICT	Kol	Introduction to SCILAB	Kinsuk Giri	27/02/2023	03/03/2023	1	All Discipline	On successful completion of the programme the participants will be able to • get an exposure on SCILAB • get an overview on solution techniques • solve problems using SCILAB
41.	PS73	Contact	BBSR	National Education Policy (NEP) 2020 – Reforms in Higher Education	Urmila Kar	27/02/2023	03/03/2023	1	Faculty members and technicians from all AICTE approved Institutes	After attending the programme, participants will be able to: • explain the guiding principles of NEP 2020. • explain new vision for India's higher education system. • explain the major reforms identified in NEP 2020. • identify the role of teachers of Higher Education Institutes (HEIs) as revealed in NEP 2020.
42.	CU97	Contact	Guw	Engineering Optimization	Kinsuk Giri	06/03/2023	10/03/2023	1	All Discipline	On successful completion of the programme the participants will be able to • get exposure in Optimization • describe the fundamentals of Optimization techniques • apply tools for problem solving in Optimization

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43.	CU98	Contact and ICT (both)	Kol	Refresher course on MATLAB & LABVIEW Applications	Sagarika Pal	06/03/2023	10/03/2023	1	Faculty of Electrical, Mechanical, Electronics & Instrumentation disciplines	After completing the course the participant will be able to • Use MATLAB commands, SIMULINK, Control system tool Box • Develop GUI files for interraction with MATLAB Toolbox • Explain features of LABVIEW • Create VI files • Apply VI files in various fields • Apply Data Acquisition System in LABVIEW
44.	PS79	ICT	Kol	NBA Accreditation with Document Preparation	Rayapati Subbarao	06/03/2023	10/03/2023	1	Faculty of All Discipline	At the end of the programme, the participants will be to: • Identify the Impact of NBA Accreditation. • Prepare Vision, Mission, Program Educational Objectives. • Prepare Outcomes and Program Outcomes. • Learn how to prepare SAR. • Practice Criteria i to x.
45.	CU100	ICT	Kol	Vibration and Its Effects on Engineering Systems	Nirmal Kumar Mandal & Santanu Bhanja	06/03/2023	10/03/2023	1	Faculty of Engineering with preference to Mechanical, Civil , Architecture & allied disciplines	After attending the course, the participants will be able to • Understand different types of vibrations • Understand the importance of vibration analysis in Mechanical and Civil Engineering • Understand the application of vibration analysis in design of machines • Identify the major design and detailing considerations of structures subjected to vibrations
46.	CU101	Contact and ICT (both)	Kol	Teaching – Learning Process using Instructional Media	Subrata Chattopadhyay & Sagarika Pal	13/03/2023	17/03/2023	1	Faculty from any disciplines	After attending the course the participants will be able to • Understand the utility of instructional media • Know the types of instructional media and its advantages • Familiar with the computer to be used as instructional media and its advantages and limitations • Understand the courseware • Classify the Different types of courseware • Application of Computer assisted instruction • Know the feathers of CAI • Explanation of different types of CAI • A model class with CAI
47.	PS74	ICT	Kol	Induction Training	Habiba Hussain	13/03/2023	17/03/2023	1	Faculty from all disciplines	After attending the programme, participants will be able to: • Distinguish the different roles of a teacher • Identify essential teaching skill components • Plan instruction using different strategies • Integrate media and/or technology in teaching • Assess learning

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						From	To			
48.	PS75	Contact	BBSR	Waste Water Treatment: Pollution Control and Reuse	Subrata Mondal	13/03/2023	17/03/2023	1	Faculty of Chemical Engg. Environmental Engg., Science, Textiles Engg., and allied disciplines	After attending this program, participants would be able to: • explore the characteristics of various industrials wastewater; • describe the wastewater treatment using low cost adsorbents and nano sized adsorbents; • describe the wastewater treatment using membrane technology etc. • explain the characterizations of wastewater;
49.	CU52	Contact	Kol	Laboratory Practice on Coarse Aggregate and Fine Aggregate	Uday Chand Kumar	13/03/2023	17/03/2023	1	Laboraotry Instructor / Technician / Assistant of Civil Engg. and allied branches deptt.	After attending the programme the participants will be able to • Explain basic concepts on laboratory tests of Aggregates • Guide students in conducting different laboratory experiments for determination of various parameters. • Demonstrate different tests on aggregates.
50.	CU65	ICT	Kol	Topics in Algorithm	Samir Roy & Ranjan Dasgupta	13/03/2023	17/03/2023	1	Faculty of CSE, IT, MCA disciplines	After successful completion of the program, the participants will be able to • Explain the fundamental concepts of analysis of algorithms • Identify different approaches to deal with computational problems
51.	SPL09	ICT+ Contact (Hybrid)	Kol	Rethinking Curricullam in line with NEP 2020	Habiba Hussain	20/03/2023	22/03/2023	3 days	Faculty of all disciplines	After attending the course the participants will be able to • analyse the intricacies in curricular structure in technical education • reflect upon the existing pedagogical practices • integrate components for creating a holistic learning culture
52.	PS76	ICT	Kol	Problem-Based Learning-Towards Advanced Pedagogy	Indrajit Saha, Sagarika Pal, Kinsuk Giri & Arpan Kumar Mondal	20/03/2023	24/03/2023	1	Techical teachers from all disciplines	After attending the course the participants will be able to • Explain the basic problem solving strategies in classroom • Identify specific problems covering a particular area of learning • Solve problems in various branches of Engineering through PBL • Analyse the benefits associated with PBL compared to conventional learning
53.	CU91	ICT	Kol	Applied Optimization of Engineering Systems with MATLAB	Nirmal Kumar Mandal	20/03/2023	24/03/2023	1	All Disciplines	After attending the programme the participants will be able to • Model a physical system • Explain linear and nonlinear regression • Optimise a function using GA, PSO
54.	SPL28	Contact	BBSR	Renewable Energy Sources and Emerging Technologies	Sheela Yadav Rai	20/03/2023	24/03/2023	1	All Discipline	After attending the programme the participants will be able to: • Understand Energy Sources and their utilization • Explain Environmental aspects of electric energies generation • Understand the scope of Solar Thermal Conversion and Solar Photovoltaic system • Describe about wind energy, Geothermal energy and Biomass • Apply Non-conventional energies through various agencies • viz. WBREDA

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55.	CU33	ICT	Kol	Engineering Capstone Project	Prasanta Sarkar	20/03/2023	24/03/2023	1	Faculty and Technical Staff of all Disciplines	After attending the programme, the participants will be able to • Form Capstone Project Team • Identify Capstone Project topic • Prepare Capstone Project proposal • Develop Capstone Project • Assess Capstone Project
56.	MGT08	Contact	Guw	Management Issues of Labrotary and Workshop Classes	Dipankar Bose	20/03/2023	24/03/2023	1	Faculty members of all technical Institutions of N.E.Region	After attending the programme the participants will be able to • know various management issues of conducting laboratory and workshop classes • understand the effective techniques of management of classroom, machines/equipment and manpower • state different safety aspects
57.	PS49	ICT	Kol	Induction Training	Sheela Yadav Rai	27/03/2023	31/03/2023	1	All Discipline	After attending the programme the participants will be able to • Formulate the lesson plan • Prepare the instructional objectives • Identify the principles of evaluation • Distinguish between types of evaluation
58.	CU103	Contact	BBSR	Formal Languages and Automata	Samir Roy	27/03/2023	31/03/2023	1	Techniical teachers from all disciplines	After successful completion the course the participant will be able to • Apply the principles & techniques of Formal Languages and Automata in computational systems. • Implement Formal languages and Automata in software design. • Explain the concepts of Formal Languages and Automata in classroom
59.	CU104	ICT	Kol	ICT Tools for Effective Teaching and Learning	Kinsuk Giri & Arpan Kumar Mondal	27/03/2023	31/03/2023	1	Techical teachers and staff from all disciplines	After going through this program the participants will be able to: • Explain the need for online pedagogy • Plan online instruction • Explain the concept of online Mode of teaching-learning, • Understand the use of various ICT tools, • Apply different online tools for ICT based teaching learning • Apply different online tools for online assessment • Incorporate different principles for effective online delivery

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60.	CU48	Contact and ICT (both)	Kol	Advanced Digital Electronics	Subrata Chattopadhyay	27/03/2023	31/03/2023	1	Faculty from Electrical, Electronics, Instrumentation and allied disciplines	After attending the course the participants will be able to • Understand the operation and application of Combinational circuits like ○ Decoder ○ Encoder ○ Multiplexer ○ Demultiplexer • Understand the operation and application of Sequential circuits like ○ Flip-Flops ○ Registers ○ Counters • Understand the operation of different digital devices ○ A/D and D/A converter ○ Digital Logic Families (TTL, ECL, DTL, CMOS) ○ Programmable Logic Devices (ROM, PLA, PAL)
61.	SPL25	Contact	Guw	FDP on Preparation of Course file and Plan Teaching for OBE	Urmila kar	27/03/2023	31/03/2023	1	All Discipline	After attending the programme, participants will be able to: · Explain the need for and features of Outcome Based Education(OBE) · Decide learning outcomes for 21st Century Learners · Identify parameters for Outcome Based Learning Teaching(OBLT) · Plan teaching for Active Learning · Prepare course file for effective teaching
62.	CU47	ICT	Kol	Introduction to Machine Learning and Deep Learning	Indrajit Saha	27/03/2023	31/03/2023	1	All Discipline	After attending the program, the participants will be able to • describe the fundamentals of Machine Learning (ML) and Deep Learning (DL) • apply ML and DL techniques for clustering, classification and regression • • explain ML and DL in classroom teaching

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